Diagnosis and Treatment of Vascular Disease

ABSTRACT

The present invention is based at least in part on the discovery of polymorphisms within the thrombospondin 1 (THBS1) and thrombospondin 4 (THBS4) genes. Accordingly, the invention provides nucleic acid molecules having a nucleotide sequence of an allelic variant of a THBS1 or THBS4 gene. The invention also provides methods for identifying specific alleles of polymorphic regions of a THBS1 or THBS4 gene, methods for determining whether a subject has or is at risk of developing a disease which is associated with a specific allele of a polymorphic region of a THBS1 or THBS4 gene, *e.g.*, a vascular disease, based on detection of polymorphisms within the THBS1 or THBS4 gene, and kits for performing such methods. The invention further provides methods for identifying a subject who has, or is at risk for developing, a vascular disease or disorder as a candidate for a particular clinical course of therapy or a particular diagnostic evaluation. The invention further provides methods for selecting a clinical course of therapy or a diagnostic evaluation to treat a subject who is at risk for developing, a vascular disease or disorder.